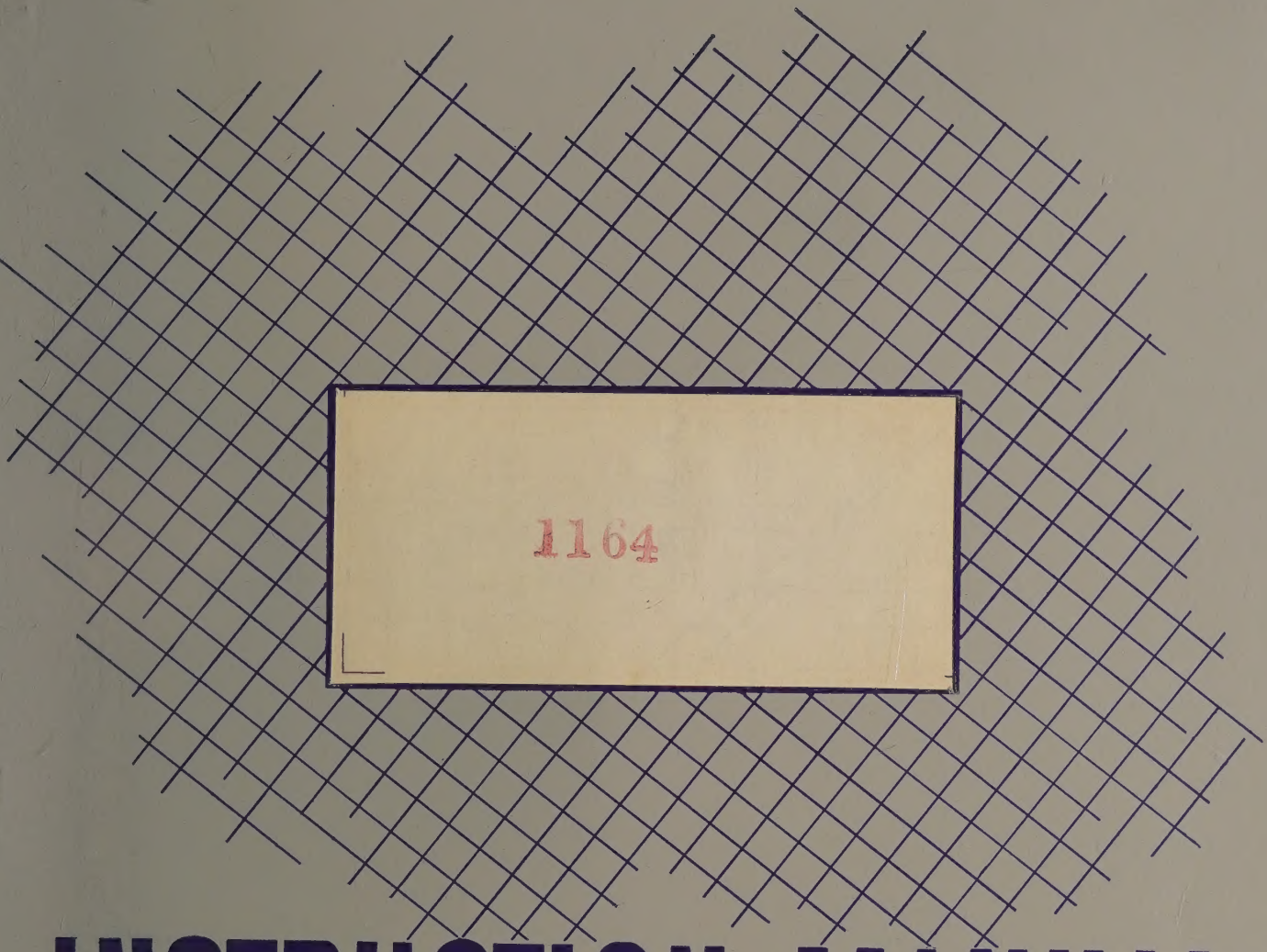
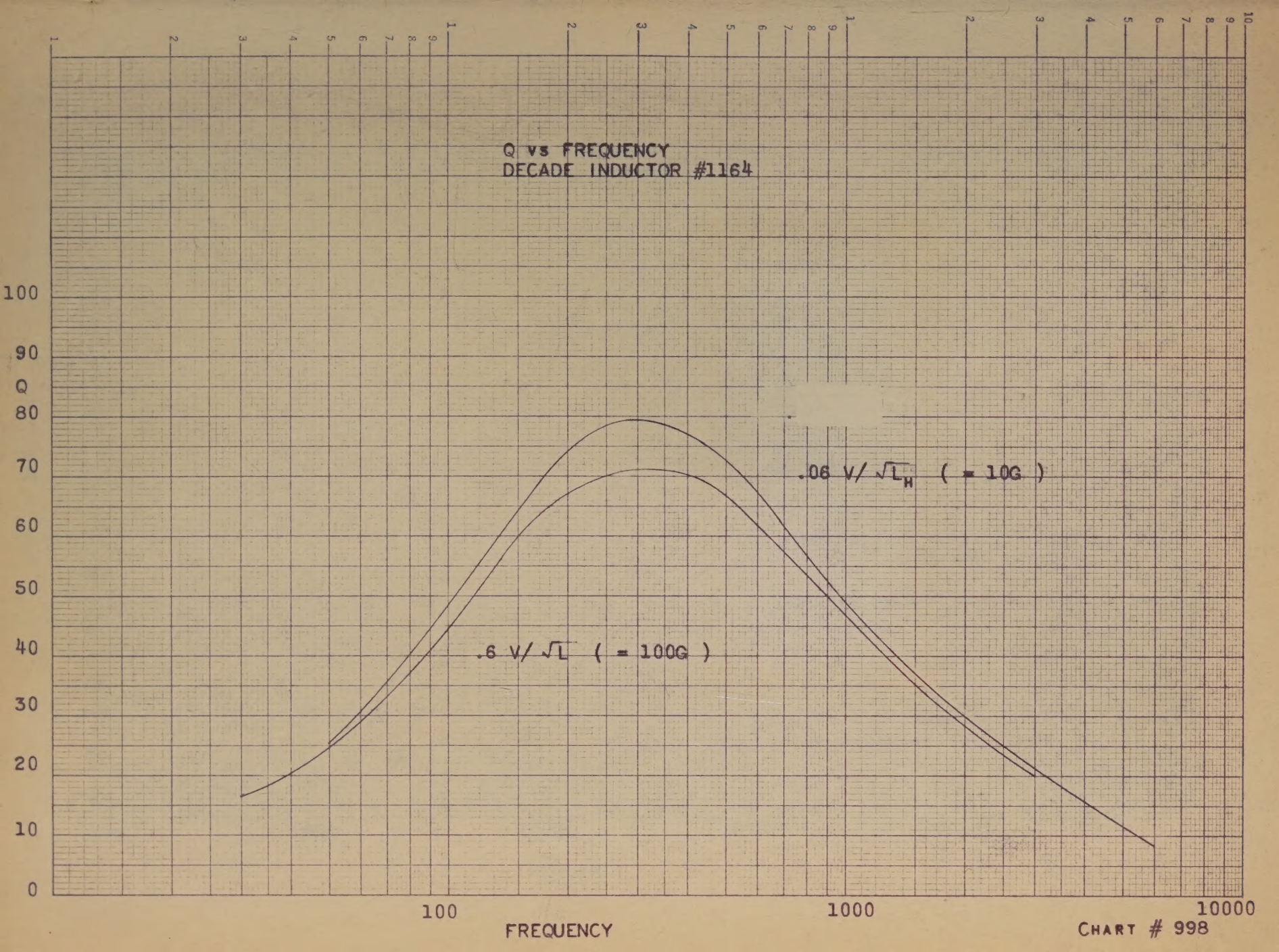
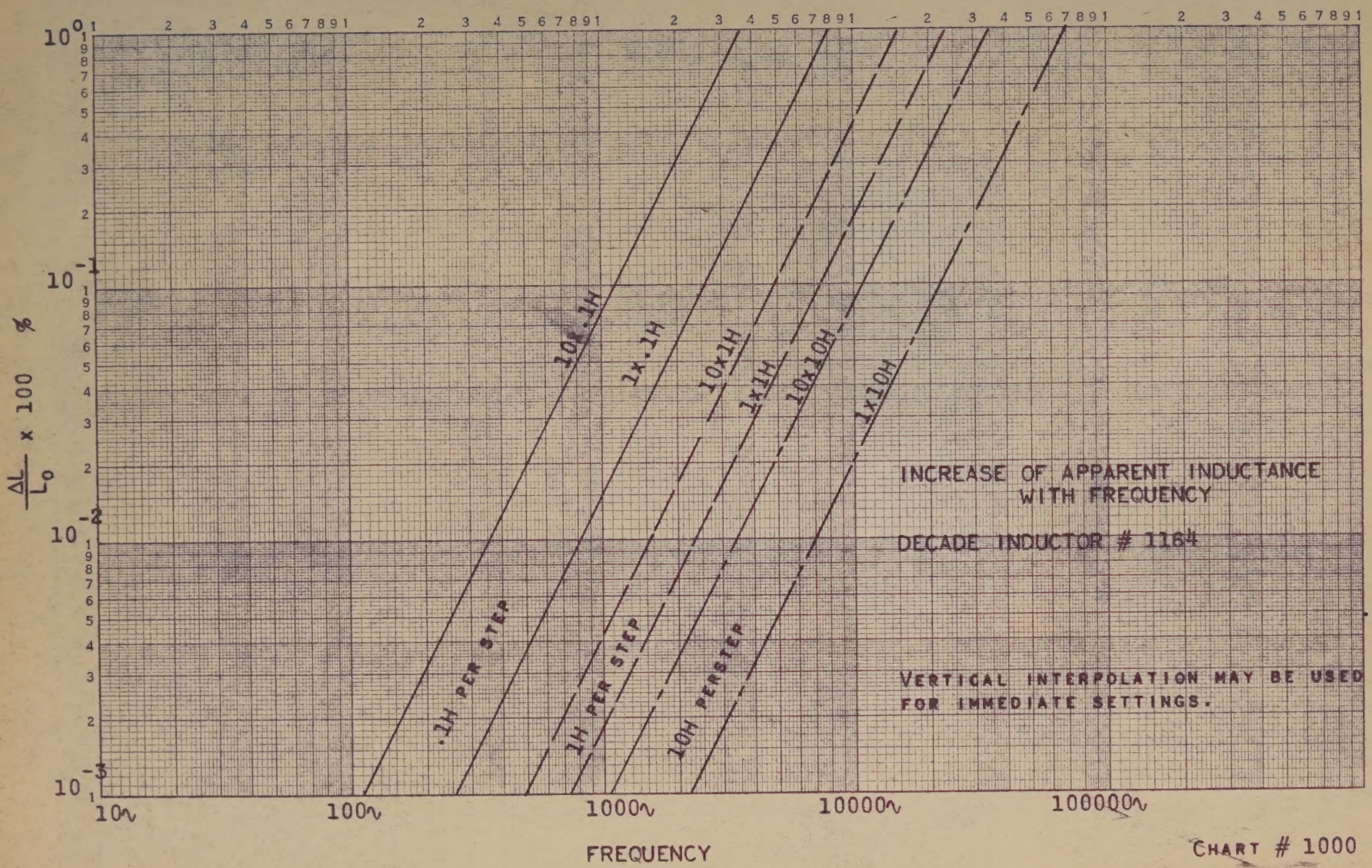


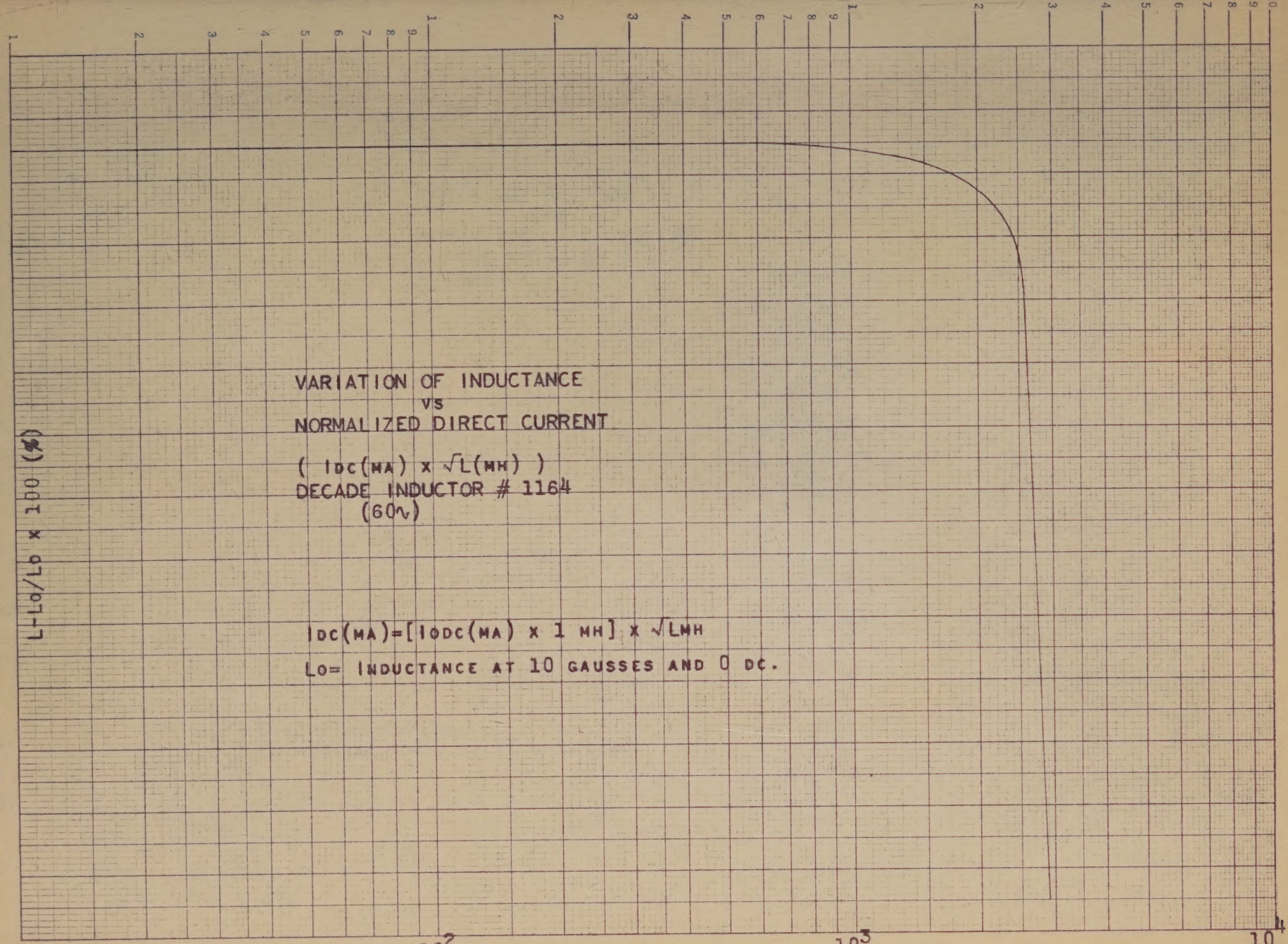
INSTRUCTION MANUAL

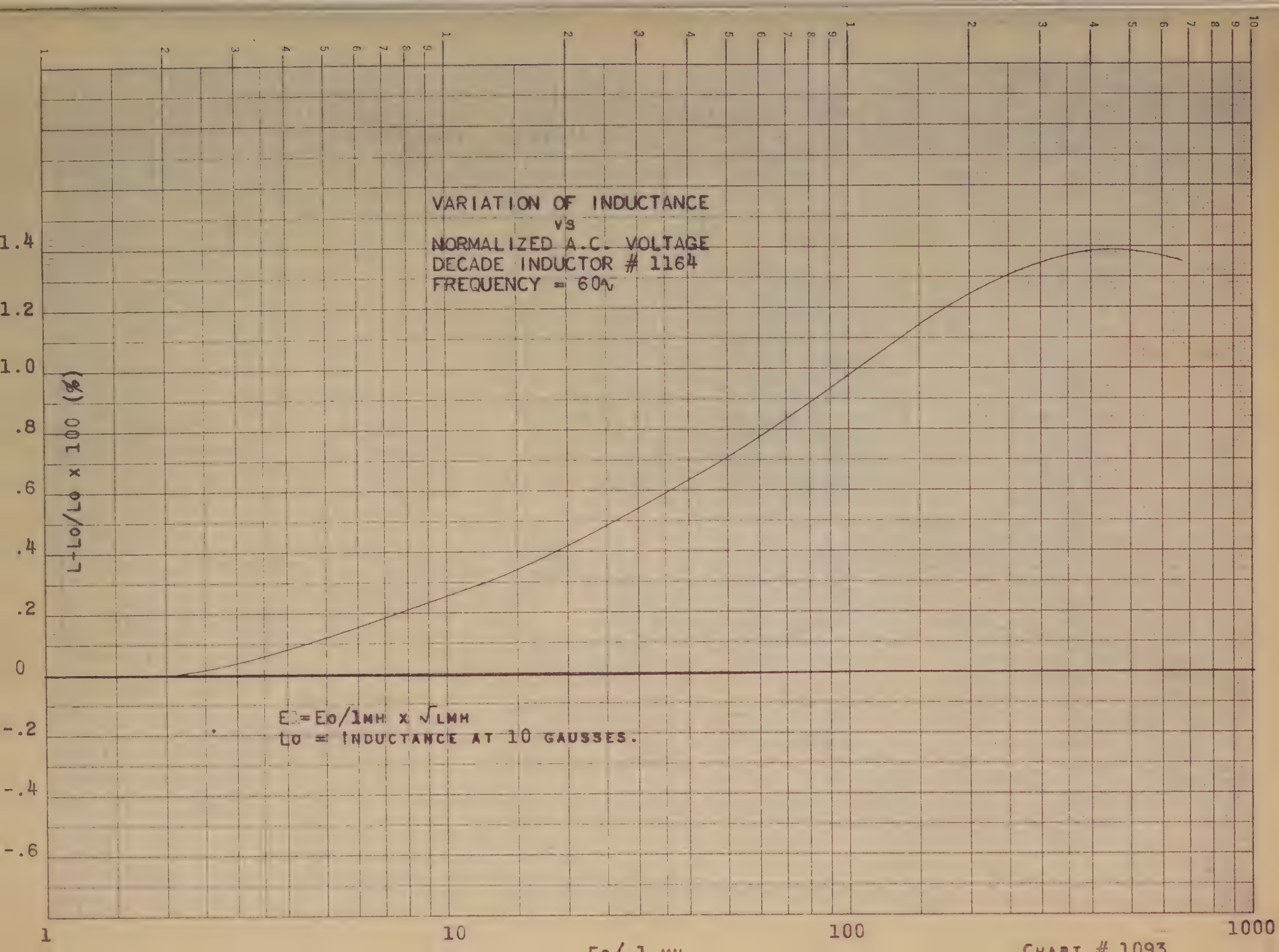
FREED TRANSFORMER CO., INC.
1718 WEIRFIELD ST., BROOKLYN (RIDGEWOOD) 27, N. Y.

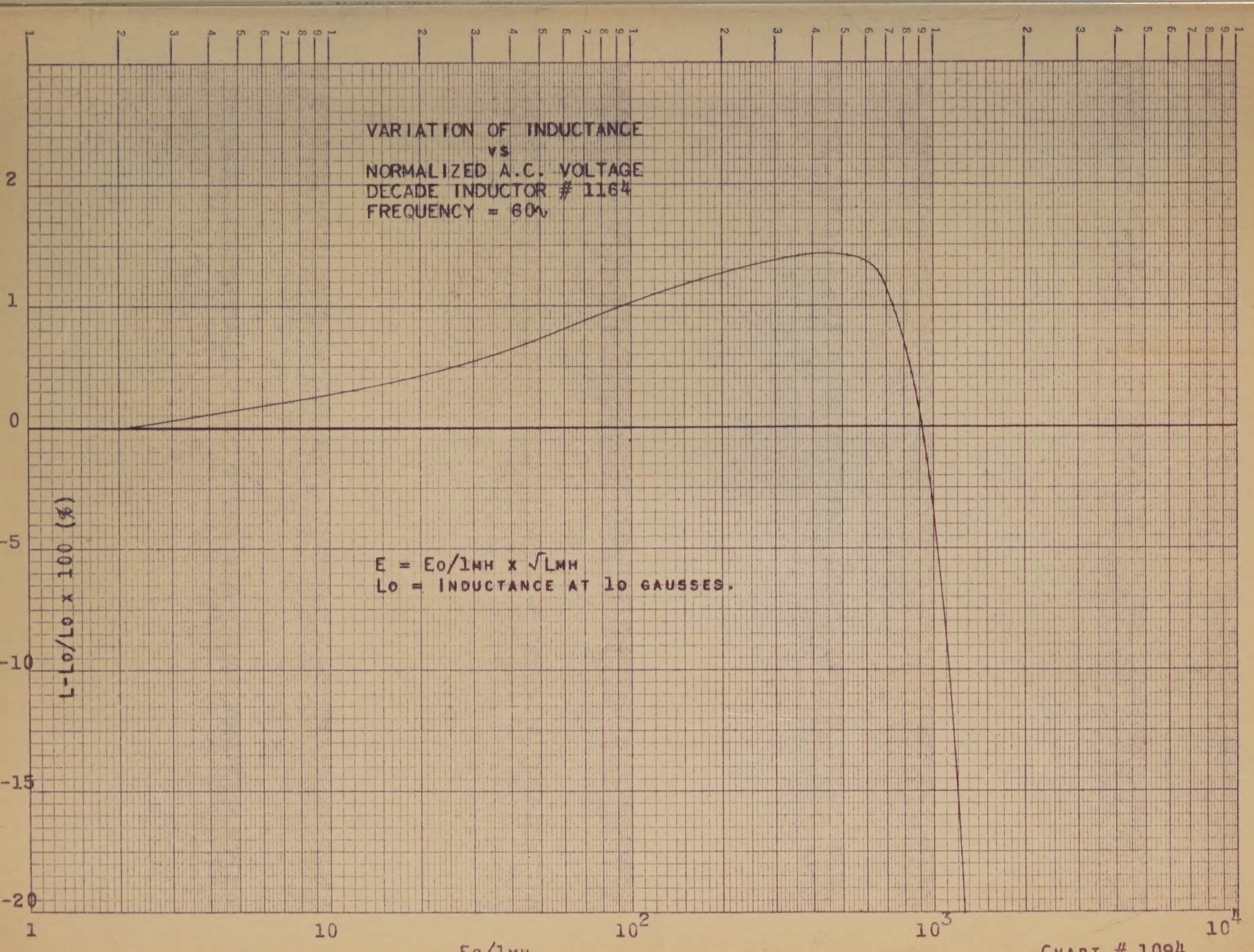
1164


Q vs FREQUENCY
DECADE INDUCTOR #1164
100
90
Q
80
70
60
50
40
30
20
10
0
.06 V/ √L_H (= 10G)
.6 V/ √L (= 100G)
100
1000
10000
FREQUENCY
CHART # 998


$\frac{\Delta L}{L_o}$ x 100 %
10Ω .1H
1x .1H
10x1H
1x1H
10x10H
1x10H
.1H PER STEP
1H PER STEP
10H PERSTEP
INCREASE OF APPARENT INDUCTANCE WITH FREQUENCY
DECADE INDUCTOR # 1164
VERTICAL INTERPOLATION MAY BE USED FOR IMMEDIATE SETTINGS.
10Ω
100Ω
1000Ω
10000Ω
100000Ω
FREQUENCY
CHART # 1000


VARIATION OF INDUCTANCE
VS
NORMALIZED DIRECT CURRENT
(IDC(MA) x √L(MH))
DECADE INDUCTOR # 1164
(60∿)
IDC(MA)=[IODC(MA) x 1 MH] x √LMH
LO= INDUCTANCE AT 10 GAUSSES AND 0 DC.
L-Lo/Lo x 100 (%)
0
-5
-10
-15
-20
-25
10
10^2
10^3
10^4
CHART # 1092


VARIATION OF INDUCTANCE
vs
NORMALIZED A.C. VOLTAGE
DECADE INDUCTOR # 1164
FREQUENCY = 60∿
L-Lo/Lo x 100 (%)
1.4
1.2
1.0
.8
.6
.4
.2
0
-.2
-.4
-.6
E = Eo/1MH x √LMH
Lo = INDUCTANCE AT 10 GAUSSES.
1
10
100
1000
CHART # 1093


VARIATION OF INDUCTANCE
vs
NORMALIZED A.C. VOLTAGE
DECADE INDUCTOR # 1164
FREQUENCY = 60~
E = Eo/1MH x √LMH
Lo = INDUCTANCE AT 10 GAUSSES.
L-Lo/Lo x 100 (%)
2
1
0
-5
-10
-15
-20
1
10
10^2
10^3
10^4
Eo/1MH
CHART # 1094